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| FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081 | | | EXAMINER CHANKONG, DOHM | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2152 | |

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/768,375

Applicant(s)

SHAH ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/12/04 7/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1> Applicant's amendment and remarks have been reviewed. Claims 1-23 are further presented for examination.

Response to Arguments

2> Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment.

3> Applicant's arguments in regards to the use of Beddus as a teaching for the use of lightweight protocol messages have been considered but are not persuasive. Applicant is arguing in substance that claims 6-12 refer to the use of a lightweight network communication protocol and points to the specification as evidence of this assertion. However, while this may be true in regards to the examples given by Applicant [winsock and request/response], Examiner maintains that no where in the specification or the claims is it clearly stated that the lightweight protocol needs to be a network communications protocol. The specification merely defines a lightweight protocol as being a protocol with low processing requirements and the claims similarly only point to a lightweight protocol with no further elaboration.

Beddus discloses the use of a lightweight directory access protocol, or LDAP and the translation of calls into LDAP messages. Applicant argues that this is unrelated to the lightweight messages of claims 6-12. As stated previously, Examiner could not find any support for Applicant's assertion that the claimed "lightweight protocol messages" is

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applicable only to lightweight network communication protocols. Since there is no concrete or clear basis for the use of a "lightweight protocol", Examiner is allowed to interpret its usage as broadly as possible. In this regard, LDAP can be described as a network communication protocol because it provides user access to information stored on a server.

Claim Rejections - 35 USC § 103

4> The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5> Claims 1-6 and 13-23 are rejected under 35 U.S.C § 103(a) as being unpatentable over Auerbach et al, U.S Patent No. 6,549,937 ["Auerbach"], in view of Dutta, U.S Patent Application Pub. No. US 2002/0072980 A1 in further view of Sitbon, U.S Patent No. 5,568,487.

6> Sitbon was cited by Examiner in the previous action, 4.8.2004.

7> As to claim 1, Auerbach discloses a method comprising:
examining a call, the call corresponding to an application program interface for a first

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transport-layer connection-oriented protocol [Figure 3 «item 126» | column 2 «lines 29-53»];
and

if the call is of a first type, translating the call to one or more protocol messages recognized by a second node in the system area network, the one or more protocol messages being defined by a second transport-layer connection-oriented protocol, and communicating the one or more protocol messages to the second node for processing according to the first transport-layer connection-oriented protocol [column 2 «lines 29-53» | column 6 «lines 59-64»].

Auerbach discloses implementing application nodes in a LAN and WAN in his invention [column 4 «lines 20-33»] but does not specifically disclose the implementation of a system area network. Auerbach also discloses sending various data with the call [column 7 «lines 31-35» | column 7 «lines 59-64»] but does not specifically disclose the use of file descriptors.

8> Dutta discloses a similar system to Auerbach (instant messaging application [paragraph 0046]) and further specifies that such applications are compatible with a variety of networks including LANs, WANs and system area networks. Therefore, it would have been obvious to one of ordinary skill in the art to have reasonably inferred that a system area network would have been compatible with Auerbach's networking method. One would have been motivated to incorporate the system area network into Auerbach's invention to increase the amount of networks with which the nodes in Auerbach's system can communicate.

9> Sitbon discloses utilizing file descriptors along with API calls when converting a message from a first protocol format into a second protocol format [column 3 «lines 1-12 and 47-57»] because the file descriptors aid in the conversion of API calls [column 6 «lines 12-14»]. It would have been obvious to one of ordinary skill in the art to have incorporated Sitbon's file descriptor functionality into Auerbach's call conversion process to help keep track of the function calls, as taught by Sitbon.

10> As to claim 2, Auerbach discloses the method of claim 1 including processing the call using an operating system of the application node if the call and the file descriptor are of a second type [Figure 3 «item 130» | column 8 «lines 9-27» where: the services module is comparable in functionality to the application node].

11> As to claim 3, Auerbach does not disclose the method including assigning the file descriptor using an operating system of the application node.

12> Sitbon discloses the method including assigning the file descriptor using an operating system of the application node [Figure 1 «item W» | column 2 «lines 33-44» where: the conversion module is analogous to an application node within Sitbon's system]. It would have been obvious to one of ordinary skill in the art to implement Sitbon's file descriptor assignation ability into Auerbach's application nodes to better keep track of the function calls in his system before they are sent to be converted.

13> As to claim 4, Auerbach does disclose use of communications identifier [Figure 4A where: the contact name identifies the node to which the call is to be sent] but does not specifically disclose the method including mapping a communications identifier, received in the application node from the second node and corresponding to a network connection managed by the second node, to the file descriptor.

14> Sitbon discloses a method including mapping a communications identifier, received in the application node from the second node and corresponding to a network connection managed by the second node, to the file descriptor [column 9 «line 66» to column 10 «line 12» | column 10 «line 30» where: the protocol address is associated with a “distant entity to be connected”, the distant entity is analogous to the second node, and the protocol address helps define the network connection of said entity]. It would have been obvious to one of ordinary skill in the art to include Sitbon’s communications identifier functionality into Auerbach’s call conversion system to allow users in Auerbach’s system to constantly be aware of other users in the network [Sitbon – column 10 «lines 56-65»].

15> As to claim 5, Auerbach discloses a network comprising:
a first node [Figure 3 «item 116»]; and
an application node including a processor configured for [Figure 3 «item 112»]:
examining a call, the call corresponding to an application program interface for
a first transport layer connection-oriented protocol [Figure 3 «item 126» | column 2
«lines 29-53»]; and

if the call is of a first type, translating the call to one or more protocol messages recognized by a second node in the system area network, the one or more protocol messages being defined by a second transport-layer connection-oriented protocol, and communicating the one or more protocol messages to the second node for processing according to the first transport-layer connection-oriented protocol [column 2 «lines 29-53» | column 6 «lines 59-64»].

Auerbach discloses implementing application nodes in a LAN and WAN in his invention [column 4 «lines 20-33»] but does not specifically disclose the implementation of a system area network. Auerbach also discloses sending various data [column 7 «lines 31-35» | column 7 «lines 59-64»] but does not specifically disclose the use of file descriptors.

16> Dutta discloses a similar system to Auerbach (instant messaging application [paragraph 0046]) and further specifies that such applications are compatible with a variety of networks including LANs, WANs and system area networks. Therefore, it would have been obvious to one of ordinary skill in the art to have reasonably inferred that a system area network would have been compatible with Auerbach's networking method. One would have been motivated to incorporate the system area network into Auerbach's invention to increase the amount of networks with which the nodes in Auerbach's system can communicate.

17> Sitbon discloses utilizing file descriptors along with API calls when converting a message from a first protocol format into a second protocol format [column 3 «lines 1-12 and 47-57»] because the file descriptors aid in the conversion of API calls [column 6 «lines 12-

14»]. It would have been obvious to one of ordinary skill in the art to have incorporated Sitbon's file descriptor functionality into Auerbach's call conversion process to help keep track of the function calls, as taught by Sitbon.

18> As to claim 6, Auerbach discloses the network of claim 5, further including a network node, wherein the first node is a proxy node including a processor configured for translating the call to a protocol recognized by the network node [Figure 3 «items 126, 112, 128, 130» | column 6 «line 43» to column 7 «line 17»].

19> As to claims 13-15, as they are merely network implementations of the steps of the methods of claims 2-4, respectively, they do not teach or further define over the claimed limitations. Therefore, claims 13-15 are rejected for the same reasons set forth in claims 2-4, respectively, supra.

20> As to claim 16, Auerbach discloses an apparatus comprising:

a port for connecting the apparatus to a network [Figure 2 «item 112» where: the conversion platform is analogous to the apparatus and is connected to the network servers, 106, 108, 110] and

a processor configured for [Figure 3 «item 112»]:

examining a call, the call corresponding to an application program interface for a first transport layer connection-oriented protocol [Figure 3 «item 126» | column 2 «lines 29-53»]; and

if the call is of a first type, translating the call to one or more protocol messages recognized by a second node in the system area network, the one or more protocol messages being defined by a second transport-layer connection-oriented protocol, and communicating the one or more protocol messages to the second node for processing according to the first transport-layer connection-oriented protocol [column 2 «lines 29-53» | column 6 «lines 59-64»].

Auerbach discloses implementing application nodes in a LAN and WAN in his invention [column 4 «lines 20-33»] but does not specifically disclose the implementation of a system area network. Auerbach also discloses sending various data [column 7 «lines 31-35» | column 7 «lines 59-64»] but does not specifically disclose the use of file descriptors.

21> Dutta discloses a similar system to Auerbach (instant messaging application [paragraph 0046]) and further specifies that such applications are compatible with a variety of networks including LANs, WANs and system area networks. Therefore, it would have been obvious to one of ordinary skill in the art to have reasonably inferred that a system area network would have been compatible with Auerbach's networking method. One would have been motivated to incorporate the system area network into Auerbach's invention to increase the amount of networks with which the nodes in Auerbach's system can communicate.

22> Sitbon discloses utilizing file descriptors along with API calls when converting a message from a first protocol format into a second protocol format [column 3 «lines 1-12 and 47-57»] because the file descriptors aid in the conversion of API calls [column 6 «lines 12-

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14»]. It would have been obvious to one of ordinary skill in the art to have incorporated Sitbon's file descriptor functionality into Auerbach's call conversion process to help keep track of the function calls, as taught by Sitbon.

23> As to claims 17-19, as they are claims to an apparatus that has the functionality of the network of claims 13-15, they do not teach or further define over the claims limitations. Therefore, claims 17-19 are rejected for the same reasons set forth in claims 13-15, supra.

24> As to claims 20-23, as they are claims to an article that implements the steps of the method of claims 1-4, they do not teach or further define over the claimed limitations. Therefore, claims 20-23 are rejected for the same reasons set forth in claims 1-4, supra.

25> Claims 7, 9 and 10 are rejected under 35 U.S.C § 103(a) as being unpatentable over Auerbach, Dutta and Sitbon, in further view of Kamath, U.S Patent No. 6.754.696.

26> As to claim 7, Auerbach discloses a network wherein the processor is further configured for translating a call to another protocol message [abstract | Figure 3] but does not specifically disclose that the second protocol is a lightweight protocol.

27> Kamath discloses translating a call to a lightweight protocol message [abstract | column 12 «lines 62-67»]. It would have been obvious to one of ordinary skill in the art to incorporate lightweight protocol into Auerbach's call conversion system to increase the

number of protocols with which Auerbach is compatible and also enhancing system scalability.

28> As to claim 9, Auerbach, Dutta, Sitbon and Kamath disclose the system area network of claims 5 and 7 wherein the processor translates a call to a lightweight protocol message, and Auerbach further discloses translating the call to a plurality of protocol messages [column 9 «lines 55-59» where: one message is translated to the communication protocols for each service provider and forwarded to each provider].

29> As to claim 10, Auerbach discloses a network wherein the processor is configured for translating the call to a protocol message using a protocol message received from the first node [column 7 «lines 29-64» | column 8 «lines 28-38» | column 9 «lines 7-39»] but does not specifically disclose the use of lightweight protocol messages.

30> Kamath discloses translating a call to a lightweight protocol message [abstract | column 12 «lines 62-67»]. It would have been obvious to one of ordinary skill in the art to incorporate lightweight protocol into Auerbach's call conversion system to increase the number of protocols with which Auerbach is compatible and also enhancing system scalability.

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31> Claims 8 and 11 are rejected under 35 U.S.C § 103(a) as being unpatentable over Auerbach, Dutta and Sitbon, in further view of Kamath and Buchanan et al, U.S Patent No. 6.665,674 ["Buchanan"].

32> Buchanan was cited by Examiner in the previous action, 4.8.2004.

33> As seen in claim 7, Auerbach, Dutta, Sitbon and Kamath disclose the system area network of claim 5 wherein the processor translates a call to a lightweight protocol message, but they do not specifically disclose the translation of a plurality of calls to a single message.

34> The concept of conversion of several calls into a single call is well known in the art for the obtained benefit of saving bandwidth because the data of the plurality of calls is transmitted as one message. For example, Buchanan discloses the functionality of translating a plurality of calls to a single message [column 8 «lines 59-62»]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Auerbach's call-to-message system to incorporate Buchanan's many-to-one translation functionality so messages between server and client can be accumulated and sent all at once in order to save bandwidth in transmission of the calls.

35> As to claim 11, Auerbach does disclose a network wherein the processor is configured translating the call to a protocol message using a protocol message received from the first

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node [column 7 «lines 29-64» | column 8 «lines 28-38» | column 9 «lines 7-39»] but does not specifically disclose translating more than one call.

36> Kamath discloses translating a call to a lightweight protocol message [abstract | column 12 «lines 62-67»]. It would have been obvious to one of ordinary skill in the art to incorporate lightweight protocol into Auerbach's call conversion system to increase the number of protocols with which Auerbach is compatible and also enhancing system scalability.

37> The concept of conversion of several calls into a single call is well known in the art for the obtained benefit of saving bandwidth because the data of the plurality of calls is transmitted as one message. For example, Buchanan discloses the functionality of translating a plurality of calls to a single message [column 8 «lines 59-62»]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Auerbach's call-to-message system to incorporate Buchanan's many-to-one translation functionality so messages between server and client can be accumulated and sent all at once in order to save bandwidth in transmission of the calls.

38> Claim 12 is rejected under 35 U.S.C § 103(a) as being unpatentable over Auerbach, Dutta, and Sitbon in further view of Beddus et al, U.S Patent No. 6.694.375 ["Beddus"].

39> Beddus was cited by Examiner in the previous action, 4.8.2004.

40> Auerbach does disclose a network wherein the processor is configured translating the call to a protocol message using a plurality of protocol message received from the first node [column 5 «lines 27-48» | column 7 «lines 29-64» | column 8 «lines 28-38» | column 9 «lines 7-39» where: the plurality of protocol messages are stored on each of the service providers' servers] but does not specifically disclose the use of lightweight protocol.

41> Beddus teaches the use of translating a call to a lightweight protocol message [Figures «6, 7, 8» | column 7 «line 42» to column 8 «line 11» where: LDAP is analogous to a lightweight protocol]. It would have been obvious to one skilled in the art at the time the invention was made to incorporate lightweight protocols, such as that taught by Beddus, into Auerbach's system of allowing users to find information about other users [Auerbach - column 9 «lines 55-59»]. One would have been motivated to perform such an incorporation as LDAP is well known in the art for providing quick and efficient access to information stored on a server.

42> As to claims 6-12, Auerbach does not explicitly show the use of a system area network; however it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Sitbon by including the use of a system area network in view of Dutta for the same reasons set forth in claim 5, supra.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

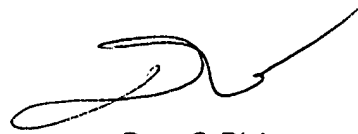
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (571)272-3946. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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DC

A handwritten signature in black ink, appearing to be 'Dung C. Dinh', with a stylized, flowing script.

Dung C. Dinh
Primary Examiner